

AMENDED CLAIMS

[received at the International Bureau on December 22, 2003 (22.12.03),
claim 1 amended]

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Patent Claims

10 Method for the Electrically Conductive Connection of Lacquered Wires

1. A method for the electrically conductive connection of at least two wires provided with a insulating lacquer (lacquered wires),
15 characterized in that

the lacquered wires are at least partially enclosed, at their regions (22, 24, 26, 32, 36) which are to be connected, by an electrically conductive material, that by the ultrasound effect, on one hand, the insulating lacquer of the wires is broken away and, on the other hand, a fixed connection occurs between the electrically conductive material and the wires, with simultaneous electrically conductive connection between them.

20 2. A method according to claim 1,
characterized in that

25 a plurality of lacquered wires (46, 48, 52, 54, 56) and at least one uninsulated conductor (64), such as stranded wire, are partially enclosed by the material.

30 3. A method according claim 1 or 2,
characterized in that

as the electrically conductive material, one in the form of a sleeve or a cup is employed.

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4. A method according to at least one of the preceding claims,
characterized in that
an inherently rigid material is employed as the electrically conductive material.

5. A method according to at least one of the preceding claims,
characterized in that
a flexible material, such as mesh, is employed as the electrically conductive material.

6. A method according to at least one of the preceding claims,
characterized in that
the material is connected in a shape @ manner with at least two, preferably more,
lacquered wires.

7. A method according to at least one of the preceding claims,
characterized in that
the wires connected to the material and to one another in an at least shape @ manner
are connected as a unit to an electrical conductor, such as a carrier (38), by means of
ultrasound welding.

8. A method according to at least one of the preceding claims,
characterized in that
as the lacquered wire, one comprising a conductor of aluminum and/or copper is
employed.

9. A method according to at least one of the preceding claims,
characterized in that
as the electrically conductive material, one of or containing copper is employed.

10. A method according to at least one of the preceding claims,
characterized in that
for applying the ultrasound, one or more work tools of an ultrasound welding machine

are employed.

11. A method according to at least one of the preceding claims, characterized in that
5 a sheet metal strip is employed as the electrically conductive material at least partially surrounding the lacquered wires (46, 48, 52, 54, 56) and any other conductor present.
12. A method according to at least one of the preceding claims, characterized in that
10 a sheet metal strip formed as a crimp (44) is employed.
13. A method according to at least one of the preceding claims, characterized in that
15 a single ply or multiple ply strip material is wound around the lacquered wires as the electrically conductive material.
14. A method according to at least one of the preceding claims, characterized in that
as the electrically conductive material surrounding the lacquered wires and any further
20 electrical conductor present, a preformed open receptacle (58, 60, 62), in particular with a U-, circularly or trapezoidally-shaped cross-section, is employed.

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